

## **REMARKS / ARGUMENTS**

### **I. General Remarks and Remarks Regarding the Restriction Requirement**

Please consider the application in view of the following remarks. Applicant thanks the Examiner for his careful consideration of this application.

On November 9, 2005, during a telephone conversation with the Examiner, claims 1-25 were provisionally elected in response to the Examiner's restriction requirement. This provisional election is hereby confirmed and claims 26-43 have been cancelled. Applicant reserves the right to present the cancelled claims in one or more continuing applications.

### **II. Disposition of Claims**

Claims 1-25 are pending in this application. Claims 26-43 have been cancelled herein.

Claims 1, 2, 5, 6, 10, 11, 16, and 18-21 have been amended herein. These amendments are supported by the specification as filed.

Claims 2, 5, 6, 10, 11, 18, 19, and 21 stand rejected under 35 U.S.C. § 112. Claims 1-5, 7, 8, and 19-25 stand rejected under 35 U.S.C. § 102(e). Claims 9-18 stand rejected under 35 U.S.C. § 103(a).

### **III. Rejections of Claims**

#### **A. Rejections of Claims Under 35 U.S.C. § 112**

Claims 2, 5, 6, 10, 11, 18, 19, and 21 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. (*See* Office Action at ¶ 7.) Specifically, the Office Action states that these claims are deemed indefinite for being drawn to improper Markush groupings. *Id.* Although Applicant maintains that the original language of the claims was sufficiently definite, Applicant has amended these claims in this Response to conform with the Examiner's wishes. Applicant's originally filed claims were sufficiently definite because a Markush grouping "may be recited in a conventional manner or alternatively," so long as the alternative language "present[s] no uncertainty or ambiguity with respect to the question of scope or clarity of the claims." MANUAL OF PATENT EXAMINING PROCEDURE § 2173.05(h) (2004). Accordingly, Applicant respectfully requests the withdrawal of these rejections.

**B. Rejections of Claims Under 35 U.S.C. § 102(e)**

Claims 1-5, 7, 8, and 19-25 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,763,888 to Harris *et al.* ("*Harris*"). With respect to these rejections, the Office Action states:

Harris *et al.* discloses a process for degrading a filter cake comprising both an acid-soluble portion and a polymeric portion by contacting the filter cake with a degradation composition comprising both a delayed-release acid component, such as an ester, and a delayed-release oxidizer component, such as a metal peroxide. While Harris *et al.* (note col. 3, lines 4-12) refers to the "decomposition" of the metal peroxide, such as calcium peroxide, Harris *et al.* further notes that such decomposition occurs "under acidic conditions to generate hydrogen peroxide."

Accordingly, it is deemed that the delayed-release acid component and delayed-release oxidizer component necessarily or inherently inter-react in the manner of the reaction mechanism set forth in claim 1 wherein the acid derivative will initially react with the metal peroxide to yield the hydrogen peroxide component, and thus the acid reaction with the filter cake will be "delayed" until such reaction is complete. In this regard, Harris *et al.* clearly indicates that the yielded hydrogen peroxide will then, in turn, degrade, the polymeric portion of the filter cake in tandem with the acid derivative or component dissolving the acid-soluble portion of the filter cake.

\*\*\*\*\*

As per claims 19 and 21, it is noted that the carboxylic acid ester delayed-release acid component may comprise one or more of the components cited, such as lactone.

(Office Action at ¶ 9.)

In order to form a basis for a rejection under 35 U.S.C. § 102(b), a prior art reference must disclose each and every element as set forth in the claim. MANUAL OF PATENT EXAMINING PROCEDURE § 2131 (2004). "The identical invention must be shown in as complete detail [in the prior art reference] as is contained in the claim." *Id.* However, *Harris* does not disclose each and every element as set forth in the rejected claims, as amended herein, because *Harris* does not disclose a delayed-release acid component that comprises a degradable material that is an orthoester and/or a poly(orthoester). Therefore, *Harris* cannot anticipate Applicant's claims.

*Harris* is directed to subterranean treatment fluids that may comprise certain esters, which may be placed downhole:

Preferred esters for incorporation into treatment fluids to be used in the present invention are carboxylic acid esters, preferably those with low toxicity, high flash point, and high environmental acceptability. Esters of ethanoic and methanoic acid (acetic and formic acid) are particularly suitable.

\*\*\*\*\*

Where the acid has a hydroxy substituent, the ester may be a cyclic ester such as a lactone.

\*\*\*\*\*

Most preferably the esters are acetic esters of 1,2,3-propanetriol (glycerol) and 1,2-ethanediol (ethylene glycol).

(*Harris* at col. 3, l. 43- col. 4, l. 8.)

Although *Harris* teaches the use of delayed-release acid components that comprise *esters*, *Harris* does not disclose or teach orthoesters, either explicitly or inherently. Orthoesters are not esters – according to their reactivity – the term “orthoester” is a misnomer. Orthoesters are recognized as *ethers* based upon their chemical structure in view of their lack of base catalyzed hydrolysis. See, e.g., Anton Skrabal, Otto Ringer, *The Hydrolysis Rate of Orthoformic Acid Ethyl Ether*, CHEMICAL INSTITUTE OF THE UNIVERSITY OF GRAZ, at page 1 (January 13, 1921) (“According to its behavior during hydrolysis, which is the result of the investigation under consideration, this substance and presumably also the analog compounds with the chemical group -C(OR)<sub>3</sub>, where R signifies an alkyl, would be designated properly as ethers and not as esters, with this more proper designation already being selected in the title.”). (A courtesy copy of this article is included with this filing for the Examiner’s convenience.) Therefore, the disclosure of some carboxylic acid “esters” does not teach the use of orthoesters, which are really ethers.

Because *Harris* does not teach orthoesters or poly(orthoesters), Applicant respectfully asserts that *Harris* does not disclose each element of the methods recited in claim 1, as amended herein. Thus, *Harris* cannot anticipate this claim, and claim 1 is allowable over *Harris*. Moreover, since “a claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers,” and since claims 2-5, 7, 8, and 19-25, depend, either directly or indirectly, from independent claim 1, these dependent claims are

allowable for at least the same reasons. *See* 35 U.S.C. § 112 ¶ 4 (2004). Accordingly, Applicant respectfully requests the withdrawal of these rejections.

**C. Rejections of Claims Under 35 U.S.C. § 103(a)**

Claims 9-18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Harris* in view of U.S. Patent Application Publication No. 2005/0103496 by Todd *et al.* ("*Todd*"). With respect to these rejections, the Office Action states:

Todd *et al* discloses both the use of a delayed-release oxidizer component in an encapsulated form and the additional limitation of including the complete filter cake degradation composition within a gravel pack fluid, which is circulated during a gravel packing operation.

Accordingly, it would have been obvious to one of ordinary skill in the art to which the invention pertains, to similarly encapsulate the delayed-release oxidizer component of the filter cake degradation composition utilized in the method of *Harris et al*, as taught by Todd *et al*, in order to further control the delayed releasing of such oxidizer component, as called for in claim 9.

(Office Action at ¶ 11.)

Applicant respectfully disagrees with these rejections because *Todd* is not available as prior art under 35 U.S.C. § 103(a). Section 103(c) provides that "[s]ubject matter developed by another person, which qualifies as prior art only under [§ 102(e)] shall not preclude patentability under [§ 103(a)] where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person." 35 U.S.C. § 103(c). Because *Todd* was published after the filing date of the present application, it is only available as a prior art reference under § 102(e). The present application and *Todd* were, at the time the invention of present application was made, both owned by Halliburton Energy Services, Inc. As the present application was filed on or after November 29, 1999, Applicant's statement of common ownership at the time the invention of the present application was made is sufficient to remove prior art from the purview of § 103(a) since that prior art would have been prior art only under § 102(e). *See* MANUAL OF PATENT EXAMINING PROCEDURE § 706.02(1)(2). Accordingly, *Todd* is no longer available as prior art under § 103(a) in accordance with § 103(c). Thus, Applicant respectfully requests the withdrawal of the § 103(a) rejections against claims 9-18.

#### IV. Allowable Subject Matter

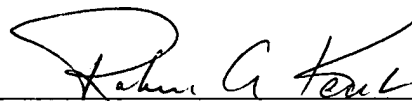
The Examiner indicated in the Office Action that claim 6 “would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, 2nd paragraph . . . and to include all of the limitations of the base claim and any intervening claims.” (Office Action at ¶ 13.) As Applicant has overcome the rejections of the base claim (*i.e.*, independent claim 1) and the rejection of claim 6 under § 112, 2nd paragraph, claim 6 as presented herein is allowable.

#### SUMMARY

In light of the above remarks, Applicant respectfully requests reconsideration and withdrawal of the outstanding rejections. Applicant further submits that the application is now in condition for allowance, and earnestly solicits timely notice of the same. Should the Examiner have any questions, comments or suggestions in furtherance of the prosecution of this application, the Examiner is invited to contact the attorney of record by telephone, facsimile, or electronic mail.

Applicant believes that there are no fees due in association with this filing of this Response. However, should the Commissioner deem that any additional fees are due, including any fees for extensions of time, Applicant respectfully requests that the Commissioner accept this as a Petition Therefor, and directs that any additional fees be charged to the Deposit Account of Halliburton Energy Services, Inc., No. 08-0300.

Respectfully submitted,



Robert A. Kent  
Registration No. 28,626  
Halliburton Energy Services, Inc.  
2600 South Second Street  
P.O. Drawer 1431  
Duncan, OK 73536-0440  
Telephone: 580-251-3125

Date: February 15, 2006